

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gerald Chan on June 7, 2010.

The application has been amended as follows:

Claims 2, 13, 37, 41, 55, 59, 60, 64, and 65 are now **cancelled**.

Claim 1 is amended as follows:

A method for predicting the behavior of a workload across a plurality of nodes, the method comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein at least part of the act of executing is performed using a processor;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system.

and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;

- d) based on a result of the tracing, predicting the behavior of the workload across the plurality of nodes; and
- e) outputting the prediction.

Claim 14 (renumbered as claim 13) is amended as follows:

A method for distributing a workload across a plurality of nodes, the method comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein at least part of the act of executing is performed using a processor;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system,
and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;
- d) based on a result of the tracing, forming a workload distribution scheme that distributes the workload across the plurality of nodes; and
- e) outputting the workload distribution scheme.

Claim 32 is amended as follows:

A computer program product that includes a ~~volatile or non-volatile~~ non-transitory computer-useable medium usable by a processor, the medium comprising a sequence of instructions which, when executed by said processor, causes said processor to execute a process for optimizing the distribution of a workload across a plurality of nodes, the process comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system,
and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;
- d) based on a result of the tracing, optimizing the distribution of the workload across the plurality of nodes; and
- e) outputting the optimized distribution scheme.

Claim 33 (renumbered as claim 37) is amended as follows:

A computer program product that includes a ~~volatile or non-volatile~~ non-transitory computer-useable medium usable by a processor, the medium comprising a sequence of instructions which, when executed by said processor, causes said processor to

execute a process for distributing a workload across a plurality of nodes, the process comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;
- d) based on a result of the tracing, forming a workload distribution scheme that distributes the workload across the plurality of nodes; and
- e) outputting the workload distribution scheme.

Claim 34 (renumbered as claim 44) is amended as follows:

A system for distributing a workload across a plurality of nodes, comprising:

- a) means for receiving a workload to be executed;
- b) means for executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein the means for executing comprises a processor;
- c) means for tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a

potential conflict in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the means for tracing is configured to predict how many data conflicts will occur;

- d) means for, based on a result of the tracing, forming a workload distribution scheme that distributes the workload across the plurality of nodes; and
- e) means for outputting the workload distribution scheme.

Claim 35 (renumbered as claim 51) is amended as follows:

A system for optimizing the distribution of a workload across a plurality of nodes, comprising:

- a) means for receiving a workload to be executed;
- b) means for executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein the means for executing comprises a processor;
- c) means for tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the means for tracing is configured to predict how many data conflicts will occur;
- d) means for optimizing the distribution of the workload across the plurality of nodes based on a result of the tracing; and
- e) means for outputting the optimized distribution scheme.

Claim 36 (renumbered as claim 54) is amended as follows:

A computer program product that includes a ~~volatile or non-volatile~~ non-transitory computer-useable medium usable by a processor, the medium comprising a sequence of instructions which, when executed by said processor, causes said processor to execute a process for predicting the behavior of a workload across a plurality of nodes, the process comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;
- d) based on a result of the tracing, predicting the behavior of the workload across the plurality of nodes; and
- e) outputting the prediction.

Claim 40 (renumbered as claim 58) is amended as follows:

A system for predicting the behavior of a workload across a plurality of nodes, comprising:

- a) means for receiving a workload to be executed;
- b) means for executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein the means for executing comprises a processor;
- c) means for tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the means for tracing is configured to predict how many data conflicts will occur;
- d) means for, based on a result of the tracing, predicting the behavior of the workload across the plurality of nodes; and
- e) means for outputting the prediction.

Claim 54 (renumbered as claim 62) is amended as follows:

A method for optimizing the distribution of a workload across a plurality of nodes, the method comprising:

- a) receiving a workload to be executed;
- b) executing the workload on a single node before the workload is sent to a plurality of nodes for execution, wherein at least part of the act of executing is performed using a processor;
- c) tracing the execution of the workload on the single node to identify a potential data conflict, wherein the potential data conflict comprises a potential conflict

in the data, and is for computing costs of migrating the workload to a distributed system, and wherein the act of identifying potential data conflicts comprises predicting how many data conflicts will occur;

- d) based on a result of the tracing, optimizing the distribution of the workload across the plurality of nodes; and
- e) outputting the optimized distribution scheme.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AVI GOLD whose telephone number is (571)272-4002. The examiner can normally be reached on M-F 8:30 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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